

Translation

PATENT COOPERATION TREATY

PCT/FR2003/001103



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

07 OCT 2004

Applicant's or agent's file reference B 3552	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/FR2003/001103	International filing date (day/month/year) 08 avril 2003 (08.04.2003)	Priority date (day/month/year) 08 avril 2002 (08.04.2002)
International Patent Classification (IPC) or national classification and IPC B05B 1/34, 7/04		
Applicant SAINT GOBAIN CERAMIQUES AVANCEES DESMARQUEST		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

- This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 17 octobre 2003 (17.10.2003)	Date of completion of this report 16 July 2004 (16.07.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FR2003/001103

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

☒ the international application as originally filed

☒ the description:

pages 1-4, 6-20, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages 5, filed with the letter of 20 April 2004 (20.04.2004)

☒ the claims:

pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages 1-16, filed with the letter of 20 April 2004 (20.04.2004)

☒ the drawings:

pages 1/5-5/5, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_  
☐ the claims, Nos. \_\_\_\_\_  
☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	1-16	YES
	Claims		NO
Inventive step (IS)	Claims	1-16	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO

**2. Citations and explanations****Claim 1**

Claim 1 meets the requirements of PCT Article 33(2) - (4) with respect to novelty, inventive step and industrial applicability.

The features of independent claim 1 are not mentioned in their entirety in any one of the documents cited in the search report or in the description. Therefore, the subject matter of claim 1 is novel.

The invention is based on the prior art described in document FR 1512626. Said document describes a spray nozzle consisting of a body defining an axial cavity and having, at one end thereof, an inlet aperture for a liquid to be sprayed and, at the other end thereof, a spray aperture, wherein said nozzle includes an axial liquid flow calibration channel that communicates directly with said spray aperture, a so-called divergent part, the shape of which is suitable for separating the liquid flow into laminar flows and rotating same, and a so-called convergent part with an axial channel that communicates with said spray aperture and the shape of which is suitable for merging back said laminar flows into a single stream.

The subject matter of the invention differs from this prior art in that said divergent part is retained in the nozzle body recess, on the downstream side, merely by engaging with an area of the cavity wall that has a suitable profile and, on the upstream side, via a cap.

The specific construction of each component of the device is neither known from the prior art cited in the search report nor considered by a person skilled in the art to be an obvious or commonplace selection.

#### **Claims 2-16**

Claims 2 to 16 relate to specific embodiments of the subject matter described in claim 1. Therefore, the requirements of PCT Article 33(2)-(4) are also satisfied.

#### **Additional observations**

Contrary to the requirements of PCT Rule 5.1(a)(ii), the description does not outline the relevant prior art set forth in document FR1512626 and does not cite this document.